

OBITUARIES OF THE MEMBERS OF THE OHIO ACADEMY OF SCIENCE

REPORT OF THE NECROLOGY COMMITTEE, 1999

The Necrology Committee of The Ohio Academy of Science, chaired by Historian-Archivist Ronald L. Stuckey, consists of William R. Burk, University of North Carolina, Chapel Hill, NC, and Relda E. Niederhofer, Firelands College of Bowling Green State University, Huron, OH. Thanks are extended to those individuals who provided information to the committee. The committee is seeking volunteers to provide information or to write obituaries on deceased members of the Academy whose obituaries have not yet been written for *The Ohio Journal of Science*. If you can assist in this effort, please send information to, or call, the office of The Ohio Academy of Science. A two page outline of instructions for preparation of obituaries in *The Ohio Journal of Science*, written by Ronald L. Stuckey, is available from the author or the Academy office.

The following is a list of deceased members of the Academy with their date of death if known and year joined whose obituaries have not yet been published in *The Journal*.

RONALD L. STUCKEY

NAME	DATE OF DEATH	YEAR JOINED
Mort W. Ake	4 April 1996	1995
Stephen W. Barber	1989	1983
Harold E. Bigony	January 1998	1949
Harold A. Bolz	27 October 1999	1961
Robert Bowman	4 November 1996	1979
William F. Davis	3 January 1991	1967
Warren C. Ellis	1999	1960
Richard B. Engdahl	6 October 1999	1964
Gertrude Masters	9 February 1989	1951
Melissa Mejia	1 July 1998	1996
Floyd R. Nave	14 September 1999	1954
Wave H. Shaffer	15 May 1995	1948
Gertrude D. Shay	1996 or 1997	1964
James F. Smith	16 February 1991	1952
Paul B. Taylor	31 July 1989	1956

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Ernests Abele (1907-1996)

Ernests Abele, 88, retired professor of physics and chairman of the Department of Physics, taught for 21 years at Ohio Northern University, Ada, OH. The courses he taught included physics, astronomy and nuclear reactor principles. He died 14 January 1996 at St. Leonard Nursing Center in Centerville, OH. He was elected a Fellow in The Ohio Academy of Science (1968), participated in the Academy's Visiting Scientists Program, and became an Emeritus member (1981). Born 19 May 1907 in Latvia, Abele earned the BS degree in education from Teacher's College of Riga, Latvia, the captain's diploma from the Navigation School, and the MS degree in mathematics from the University of Latvia. He taught at the Navigation School of Latvia (1929-1949) and at the Gymnasium in Fischback, Germany (1945-1949) before joining the physics faculty at Manchester College (IN) (1950-1952). At Ohio Northern University he became professor of physics (1952) and was chair of both the mathematics and physics departments. Professor Abele spent four summers in nuclear studies at the Argonne National Laboratory of the Atomic Energy Commission (1957-1961). In 1972 he was named an "Outstanding Educator of America." Upon his retirement (1973), he became Professor of Physics Emeritus.

At Ohio Northern University Professor Abele was a representative on the Faculty Senate, and was elected as a member of Phi Alpha Kappa (honor society, past president), Sigma Pi Sigma (physics honorary society), and Nu Theta Kappa (engineering honorary society). He was a member of the American Association for Physics Teachers, American Association of University Professors, and the American Physics Society.

On 1 January 1933, Ernests Abele married Erika Pudis who died 10 April 1983. He is survived by two daughters, Vija (Alan) Wurstner, of Dayton, OH, and Laima (Michael) Magnan, of Seattle, WA; one brother, Arvids of London, England; four grandchildren and one great-grandchild. He was preceded in death by one son, Gunar. Professor Abele left Latvia in 1949 and immigrated to the USA with his wife and two children. He was a member of the Latvian Evangelical Lutheran Church of Dayton. Funeral services were held 18 January 1996, at Hanson-Neely Funeral Home, Ada, with burial in Woodlawn Cemetery, Ada. Memorial contributions may be made to Karlis Skalbe Alumni for the Museum in Latvia.

REIDA E. NIEDERHOFER

Richard Jasper Anderson (1913-1999)

Richard Jasper Anderson, age 85, geologist, former assistant to the Vice President at Battelle Memorial Institute (Columbus, OH), Adjunct Professor of Geology at The Ohio State University, and past president of The Ohio Academy of Science, died 5 February 1999 at Riverside Methodist Hospital, Columbus, OH, after a brief illness. Serving Battelle Memorial Institute for over 25 years, Mr. Anderson was instrumental in establishing two Battelle research laboratories in western Europe. A member of The Ohio Academy of Science since 1956, he affiliated with Section Engineering, was elected a Fellow (1961), served as President (1964-1965), worked on the Development Committee (chairman), and was accorded Emeritus status (1995). His Academy presidential address, "The Geologic Implications of the Earth-moon Relationship," was published (Ohio J Sci 65:161-165).

Born 25 October 1913, in St. Petersburg, Russia, Richard Jasper Anderson (Dick) attended grammar school and Trinity (High) School in New York City (NY). Matriculating at Columbia College (now University), he earned the BA (1935) and MA in geology (1938). His Master's thesis, "A Study of the Silver Ores of the Sunshine Mine, Coeur d'Alene District, Idaho," was published, in part (Economic Geology 35:659-667. 1940). He enrolled in geology courses (1938-1941) at the University of Minnesota with the intent of earning the PhD; however, his plans changed with the onset of World War II.

Anderson's teaching experience began while studying at Columbia for his Master's degree. He was an assistant in geology (1935-1937) to Professor Armin Kohl Lobeck. His subsequent teaching experiences were: instructor in physical geology and elementary historical geology, University of Minnesota (1938-1941); instructor in general geology, University of Oregon, Portland Extension (1947); and lecturer in metallurgical engineering (1964) and adjunct professor of geology (beginning 1966) for courses in oceanography, economic geology, and professional geologists industrial relations, Department of Geology, The Ohio State University. While teaching at OSU, Anderson was known as an outstanding lecturer and enthusiastic supporter of the geology department.

Among his early professional experiences were: field investigator in the Union of South Africa, Portugal, and several western states of the United States; member of a US Geological Survey party on Kenai Peninsula, Alaska (1940); assistant (1942) and acting (1942-1943) State Geologist of Arkansas; and resident geologist for West Coast Operations, Aluminum Company of America (1943-1947). Joining Battelle Memorial Institute in 1948, he served in numerous positions, including: research engineer (1948); assistant Division Chief (1949-1950); assistant to the Director (1950-1952); manager, Overseas Project Development (1953-1955), responsible for the establishment of Battelle's research laboratories in Frankfurt, Germany, and Geneva, Switzerland; manager, Staff Education Program (1956-1957); and assistant to the vice-president (beginning 1958). When he retired (1976), he held the position of program manager. Widely known for his expertise in energy resources and the mineral wealth of the oceans, Anderson published a number of journal articles and also co-authored several Battelle technical reports on coal mining.

During retirement, Anderson devoted himself to teaching, writing, and especially lecturing. He also continued to serve Battelle as a consultant. When he gave lectures, his audiences remained attentive and engaged since he could discuss technical topics in an understandable manner. He became well-known and respected wherever he lectured. Presenting lectures at most of the Ohio colleges, as well as many campuses in Michigan, Pennsylvania, and West Virginia, he also delivered technical papers and popular talks in Australia, Canada, Columbia, Japan, Mexico, and New Zealand. His lecturing abilities earned him prestigious designations: Henry Krumb Memorial lecturer, American Institute of Mining Engineers (1969) and Distinguished Lecturer, American Chemical Society (1971, 1972). Anderson had the honor of delivering the Clarence Luther Herrick Memorial Lecture, Dennison University (1959) and the Blanche Yale Memorial Lecture, Milwaukee Public Museum (1964).

Richard Anderson held numerous memberships in professional societies: The American Association for the Advancement of Science (Fellow), American Geophysical Union, American Institute of Mining, Metallurgical and Petroleum Engineers, American Society of Photogrammetry, Canadian Institute of Mining and Metallurgical Engineers, Geological Society of America, Marine Technology Society, and Society of Economic Geologists. Dick joined Northwest Kiwanis (president) and The Torch Club. He was elected to the honorary societies, Sigma Xi (1940) and Tau Beta Pi (1955). At the community level he was active in the Covenant Presbyterian Church and civic and school activities. His interest and dedication to young people was recognized in 1959 when he was elected an honorary member of the Columbus (OH) Junior Chamber of Commerce.

Richard Jasper Anderson is survived by his wife of 59 years, Jean T. Anderson; two daughters, Lucy Lightfoot of Kalamazoo, MI, and Priscilla Staskevich of Upper Arlington, OH; five grandchildren and a great granddaughter. A private family service was held and arrangements were made by Schoedinger Northwest Chapel, Columbus, OH. Memorial contributions may be sent to Friendship Village of Dublin, Memorial Fund, 6000 Riverside Drive, Dublin, OH 43017.

WILLIAM R. BURK

Howard E. Bales (1912-1995)

Howard E. Bales, age 82, former administrator in Research and Development at Wright State University, chemistry professor at Antioch College, chemist, and high school teacher and coach, died 5 October 1995, at his daughter's home in Springfield, VA. Active in the Xenia (OH) Sertoma Club, he was president (1950) and recipient of the Sertoman of the Year Award (1994). A member of The Ohio Academy of Science since 1953, he affiliated with Section Physics and Astronomy, was elected a Fellow (1962), and accorded Emeritus status (1979).

Howard E. Bales, born 22 December 1912, in Greene County, OH, was the son of Hebron Elliott and Jennie Maude (Thomas) Bales. His initial professional positions were in coaching basketball, baseball, and track at Spring Valley, OH, and teaching junior biology and general science at Xenia High School. As a chemist, Mr. Bales joined NCR Corporation where he focused on instrumental methods of analysis for research and materials control. His subsequent professional experiences were: scientist, involving instrumental methods, the Kettering Research Labs, Yellow Springs, OH; chemistry professor, Antioch College; evaluator for recommending seniors to the Foundation Board of Merit Scholarships (now with National Merit); and resident director in the development of The Ohio State University-Miami Branch at Dayton (now Wright State University). He retired (1978) from the Research and Development area at WSU.

In professional organizations Bales was a member and past president of the Dayton Section, Optical Society of America (now affiliated with the Society of Applied Spectroscopy). While serving on the Armco board, he sponsored a science award program, later associated with State Science Day. While working at NCR, Kettering Labs, and WSU, Howard E. Bales was dubbed the poet laureate for his numerous poems that set in rhyme specific events.

Howard E. Bales is survived by his wife Eleanor Louise (Conklin) Bales; two daughters, Suellen C. Lansell of Springfield, VA, and Rebecca Jane Grether of Berkeley, CA; four grandchildren; and one sister, Gladys Collins of Xenia, OH. He was preceded in death by two infant sons; a brother, Roy T. "Dempsey" Bales; and two sisters, Reba Bales and Edith Pickering. Memorial services were held on 14 October 1995, at Faith Community United Methodist Church, Xenia, with Pastors Stephen Gill and Mark Erbes officiating. Internment took place in the Woodland Cemetery. Contributions in memory of Howard E. Bales may be made to the American Cancer Society.

WILLIAM R. BURK

Donald Keith Brundage (1913-1998)

Donald Keith Brundage, age 85, Professor Emeritus of Chemistry, University of Toledo, taught organic chemistry for 32 years from 1946 until his retirement in 1978. Dr. Brundage died 19 November 1998 at his home in Toledo, OH. As a teacher, he was well known for giving each student his respectful attention. He was a member of The Ohio Academy of Science (1948-1988) and was accorded Emeritus status (1989).

Born 24 October 1913 in Traverse City, MI, young Brundage was influenced by his father who taught physics and chemistry in the local high school. Brundage earned the AB at Michigan State Normal College (now Eastern Michigan University) (1933), and his PhD in physical and organic chemistry from the University of Michigan (1940), where his father had been awarded a PhD (1932). Brundage's doctoral dissertation, "Vapor Phase Equilibrium in the Esterification of Ethyl Alcohol by Acetic Acid," was partially published with J. O. Halford (*J Am Chem Soc* 64:36-40, 1942). His early professional experiences were as an assistant in chemistry at the University of Michigan (1935-1938), and a chemist at Bendix Aviation Corporation (MI) (1941). After teaching as an instructor in chemistry at St. Cloud State College, MN (1941-1946), Dr. Brundage joined the faculty at the University of Toledo (OH) as an associate professor (1946-1958) and professor (1958-1978). He became Professor Emeritus upon his retirement (1978). While on the faculty at the University of Toledo, he was a National Science Foundation research fellow in biochemistry at The Ohio State University (1961), and worked with Dr. Marjorie Caserio while on a sabbatical conducting nuclear magnetic resonance research at the University of California, Irvine (1967-1968). His favorite research topics involved equilibria and kinetics, especially of gas-phase organics. Dr. Brundage also consulted for the fluoridation of the water supply system for the city of Toledo.

Like his father, Donald Brundage was a lifelong member of the American Chemical Society and the American Association for the Advancement of Science. Because of his interest in history, he served as archivist for the Toledo Section of the American Chemical Society. He was also a member of the American Institute of Chemists.

Dr. Brundage had considerable knowledge about regional Indian and pioneer history. He and his wife traced their own ancestors back seven generations. Very knowledgeable about natural history, geography, and railroad history, he also had a profound interest in maps and cartography. Musically, his greatest loves were Scottish pipe bands and popular songs of the 20s and 30s which he would play on the piano.

Dr. Brundage's wife, Barbara Scott Brundage, died 19 July 1989. Surviving are his sons, William Donald of Socorro, NM, Robert Scott of Boston, MA, Richard Keith of Columbus, OH, David Ralph of Annandale, VA, and Alan Perry of Tucson, AZ; five grandsons and six granddaughters. A graveside remembrance ceremony for Brundage and his wife, Barbara, was held 20 November 1998 in Toledo Memorial Park. Boyer-VanWormer-Scott Funeral Home was in charge of arrangement. The family requests contributions to the Remembrance Fund of the Toledo Symphony League (c/o A. D. Haddad, 2148 Richards Road, Toledo, OH 43606-2566); Eastern Michigan University, Barbara E. Scott Brundage, Endowed Scholarship; or Citizens for Buckeye Basin Parks Inc., Manhattan Marsh (1312 Paxton Street, Toledo, OH 43608-2230).

REIDA E. NIEDERHOFER

Robert Elroy Culver (1926-1998)

Robert Elroy Culver, age 71, osteopathic physician, died 11 May 1998 in St. Charles Mercy Hospital, Oregon, OH, after suffering a heart attack earlier that month. A veteran of the US Army (1944-1946), he also was a colonel in the Ohio Defense Service. For several decades Culver was the team physician for the Oregon, OH, schools' sports teams. Besides serving as a physician for the US Wrestling Team, he was also a physician for several other national wrestling teams. Twice he received a commendation from the Ohio House of Representatives (1983, 1993). An avid pilot, he owned a plane and, for a while, was a co-owner of a helicopter. Since 1991, he held membership in The Ohio Academy of Science.

Robert Elroy Culver, born 1 October 1926 in Toledo, OH, was the son of Elroy and Helen Mary Culver. In 1944 he graduated from Clay High School, Clay, OH, where he played football and wrestling. After earning the BS (1951) from the University of Toledo, he received the DO (1959) in osteopathic medicine from the Chicago College of Osteopathic Medicine (now administered by Midwestern University). Dr. Culver was also a certified medical boxing professional. In Ohio his professional experiences were: intern, Sandusky Memorial Hospital (1960); physician, specializing in family practice and sports medicine, Oregon (beginning 1960); health commissioner, Village of Harbor View (beginning 1990); and director of osteopathic services, Riverside Hospital (beginning 1996). Robert Culver was also a staff member of the following Ohio hospitals: Parkview, Toledo, and St. Charles Mercy. He was the physician for the City of Oregon school system, a member of the Board of Health, chief deputy coroner, and police surgeon.

Throughout his career, Culver maintained strong interests in sports medicine. According to his stepson, Richard Stroshine, Culver "supported school sports because he came from a family of modest means and saw athletics as an avenue of advancement" (*Toledo Blade*, Toledo, OH, 12 May 1998). As a public service to local Ohio residents, Dr. Culver offered free annual examinations to athletes at Clay, Fassett, and Eisenhower junior high schools. He also served as the team doctor for the Clay football, wrestling, and track teams. Some of his other professional contributions to sports were: physician, US Wrestling Team; medical director, World Cup Wrestling; medical consultant, the Ohio Professional Boxing Commission; 3rd vice president, Ohio [Chapter], Amateur Athletic Union; and past president, Northwest [Chapter], Ohio Amateur Athletic Union.

In professional societies Dr. Culver held memberships in: the Academy of Osteopathic Medicine, 1st District (state trustee, president); American College of General Practitioners in Osteopathic Medicine and Surgery; American Osteopathic Association; and Ohio Osteopathic Association. Culver also belonged to: Air Force Association; Air Force Museum; Aircraft Owners and Pilots Association; Arthur Daly Post, American Legion; Atlas Club; Blue Knights Motorcycle Club (charter member, secretary 1985); Chicago College of Osteopathic Medicine Alumni Association; Police Department, Clay Township, OH; Elks; Sheriff's Department, Lucas County, OH; Masons; National Rifle Association (life member); Natural History Society; Ohio Historical Society; Shriners; Smithsonian Institution; Toledo Museum of Art; Toledo Zoo; University of Toledo Alumni Association (life member); and the Yondota Lodge. He was elected to the honorary society Theta Chi and received an honorary

award from the Oregon Board of Education (1983) for his volunteer service to local scholastic athletes. Named an Outstanding Team Physician for the State of Ohio (1981), Culver was also inducted into the World Sports Medicine Hall of Fame (1993).

Robert Elroy Culver is survived by his wife Sallie Jane (Corder) Culver whom he married 10 June 1972; two sons, Galen and Robert Culver; two stepsons, Ronald and Richard Stroschine; two daughters, Diana Joslyn and Patricia Smith; a sister, Roberta Kerner; and ten grandchildren. On 12 May 1998 visitation hours were held at the Eggleston-Meinert Funeral Home, Oregon, and Yondota Lodge services were held that evening. On the following day memorial services were conducted in the Heritage Christian Church, Oregon, with interment taking place in North Oregon Cemetery. Memorial donations may be made to the Dr. Culver Scholarship Fund, Clay High School Athletic Department, 5630 Seaman Street, Oregon, OH 43616-2614.

WILLIAM R. BURK

Michael Oliver Garraway (1934-1999)

Michael Oliver Garraway, age 65, Professor of Plant Pathology at The Ohio State University, died 12 June 1999 at his Worthington, OH, home. Garraway spent most of his professional teaching and research career at The Ohio State University. He chaired with distinction the OSU Senate Committee on Academic Freedom and Responsibility and the Senate Committee on Women and Minorities. He joined The Ohio Academy of Science (1969), affiliated with Section Plant Sciences (vice-president, 1984-1985), and was elected a Fellow (1977).

Born 29 April 1934 in Roseau, Dominica, British West Indies, Michael Oliver Garraway was the son of Robert Alexander and Isla Marie Benjamin Garraway. His adopted parents were Norma and Philip Rolle. After earning the BS in agronomy (1959) and the MS in plant pathology (1962) from McGill University, he received the PhD in plant pathology (1966) at the University of California, Berkeley. His master's thesis was titled "The Effect of *Phytophthora infestans* (Mont.) DBy., Infection on the Distribution Pattern of Carbon-14 in *Solanum tuberosum* L." and his doctoral dissertation elucidated the "Nutrition and Metabolism of *Armillaria mellea* (Vahl ex Fr.) Quel. in Relation to Growth and Rhizomorph Formation." Garraway gained early professional experiences: teaching assistant (1959-1960) and research assistant (1960-1962), McGill University; and teaching assistant (1962-1963), research assistant (1963-1966), and assistant research plant pathologist (1966-1968), University of California, Berkeley. On 1 July 1968, he joined the newly formed Department of Plant Pathology at OSU where he advanced from assistant professor (1968-1971) and associate professor (1971-1978) to professor (1978-1999). Since 1972 he held a quarter-time appointment in the Ohio Agricultural Research & Development Center and a courtesy appointment in the OSU Department of Botany. Garraway's appointment as Professor Emeritus would have been effective 1 July 1999, eighteen days after his death.

Among his research interests were the nutritional and environmental factors affecting fungal growth and reproduction, the influence of plant nutrition on disease susceptibility, and the response of maize leaves to biotic and abiotic stresses. Garraway taught Plant Virology and Introductory Plant Physiology and introduced two new courses, Physiology of Fungi and Disease Physiology at the OSU plant pathology department. As a consultant for Paint Research, Inc., he advised on mildew induced defacement of organic surfaces. Besides Garraway's numerous scientific journal articles, he and his former student Robert C. Evans wrote an undergraduate textbook, *Fungal Nutrition and Physiology* (John Wiley, New York, 1984; reprinted by Krieger Publishing Company, Malabar, FL, 1991).

He held memberships in the American Association for the Advancement of Science, American Institute of Biological Sciences, American Phytopathological Society, Canadian Phytopathological Society, International Society of Plant Pathology, and Mycological Society of America. An invited speaker to many professional meetings, Dr. Garraway was elected to the honorary society, Gamma Sigma Delta-Ohio Chapter, and served as its president (1977-1978). He was a founding member and secretary of the A.M.E. Foundation. His unique sense of humor, expressiveness, and exuberant zeal for life were personal trademarks by which his friends, colleagues, and family knew him.

Michael Oliver Garraway is survived by his wife Annie Marie (Watkins) Garraway whom he married in 1966; three children, Dr. Levi Alexander Garraway of Cambridge, MA, Dr. Isla Garraway Shavelle of Seattle, WA, and Doris Lorraine Garraway of Durham, NC; two brothers, Robert Anthony and Francis Alexander Garraway; eight half-siblings, James Garraway, Derek Garraway, Newton Garraway, Kathleen Garraway, Harty Garraway, Judith Pestaina, Patricia Inglis, and Marion Elwin; six adopted siblings, Patrick Rolle, Francis Rolle, Dr. Bernard Rolle, Norman Rolle, Beverly Clark, and Ivor Rolle; and many nieces, nephews, and cousins. The family received friends at Rutherford-Corbin Funeral Home, Worthington Chapel, Worthington, OH, on 16 June 1999. On the next day a Mass of Christian Burial was celebrated at St. Michael Church, Worthington, where Garraway was also a member. Burial occurred at Internment Resurrection Cemetery, Lewis Center, OH. Memorial contributions may be sent to The Ohio State University Agricultural Diversity Scholarship Fund, College of Food Agriculture and Environmental Sciences, Room 100, Agricultural Administration Building, 2120 Fyffe Road, Columbus, OH 43210 or to The James Hospice, c/o The Arthur G. James Cancer Hospital and Research Institute, 2500 Kenny Road, Columbus, OH 43210.

WILLIAM R. BURK

John Barnes Gerberich (1916-1995)

John Barnes Gerberich, age 79, entomologist, microbiologist, and Professor Emeritus of Biology and of Allied Health Professions at the University of Wisconsin-Eau Claire, died 3 December 1995 in Sacred Heart Hospital, Eau Claire. At the University's Eau Claire campus he established the Division of Allied Health Professions (1969), serving as its director until 1981. He was also instrumental in the creation of the bachelor of science program in the School of Nursing. Among his more than 90 scientific publications, mostly on mosquitoes, were two books: *Laboratory Manual for Medical Microbiology*, with Robert C. Benassi (1960); and *Bibliography of Papers Relating to the Control of Mosquitoes by the Use of Fish: An annotated bibliography for the years 1901-1966* (FAO Fisheries Technical Paper, Number 75, 1968). He joined The Ohio Academy of Science in 1944, affiliated with Section Zoology, and became a Life Member (1946).

John Barnes Gerberich, born 21 April 1916 in Wooster, OH, was the son of John A. and Anna (Weimer) Gerberich. He received his secondary education in the public schools of Cuyahoga Falls, OH. He earned the BS in education (1939) and the MA in sociology (1941) at Kent State University (OH). Under the supervision of zoologist Carl E. Venard he earned the PhD in entomology (1951) from The Ohio State University. His Master's thesis entailed "A Study of the Consistency of Informant Responses to Questions in a Questionnaire," and his doctoral dissertation elucidated the "Transmission of Bacteria through the Metamorphosis of the Housefly and the Longevity of Such an Association." While completing his graduate studies, Gerberich gained extensive professional experiences: laboratory assistant, Department of Biology, Kent State University (1939-1942); graduate assistant (1942-1945) and instructor (1945-1946), Department of Zoology and Entomology, The Ohio State University; instructor, Department of Biology, Michigan State College (now University) (1946-1947); and instructor (1947-1953) and insect control researcher (1953-1954), Department of Biology, University of Minnesota-Duluth. Joining the biology faculty, University of Wisconsin-Eau Claire, Dr. Gerberich advanced from assistant professor to professor (1954-1967). During his directorship of the Division of Allied Health Professions (1969-1981), he planned and implemented programs offering the bachelor's degree in health care administration and bachelor's and master's degrees in medical technology or environmental and public health. When he retired (1981), Dr. Gerberich was accorded the status of Professor Emeritus of Biology and of Allied Health Professions.

Gerberich's research included biological control methods of insects, immature insects, and insect microbiology. When he was appointed as a consultant with the World Health Organization to conduct research on insect pathology and vector control (1965), he embarked on a project to collect worldwide publications from 1901-1968 on the control of mosquitoes by the use of fish. The bibliographical data of the project was

stored in the Eau Claire campus computers where scientists from around the world request the retrieval of information. Dr. Gerberich also developed a system to count the mosquitoes in the north-central counties of Wisconsin.

He held memberships in the American Society of Clinical Pathologists (Board Registry of Medical Technology), Entomological Society of America, Eau-Claire City-County Alcohol Referral Council, Eau-Claire County Health Planning Council, Joint Educational Committee of State Sanitarians, West Central Wisconsin Health System Agency, Wisconsin Association of Medical Technologists (president, board director), Wisconsin Association of Milk and Food Sanitarians (president), Wisconsin Educational Congress on Aging (president, 1973), Wisconsin Public Health Association. He served as a section editor of the *American Journal of Medical Technology*. Among his honors was election to Sigma Xi. At the Eau Claire campus two scholarships in honor of Gerberich and his wife Mary were established: for juniors or seniors accepted for an internship in several areas of allied health and for seniors majoring in biology with an emphasis in entomology and invertebrates.

John B. Gerberich was preceded in death by his wife Mary Louise (Bohnsak) Gerberich whom he married in 1948. He is survived by four children, John B. Gerberich, Jr. of Altoona, WI, Mary Dale of Eau Claire, WI, Anne Marie Waddington of Omaha, NE, and Margaret Hudson of Eau Claire, WI; and four grandchildren. Visitation hours and a Parish Prayer Service were held at the Prock Funeral Home, Eau Claire, on 5 December 1995. The following day a Mass of Christian Burial was celebrated at the Immaculate Conception Church, Eau Claire, with the Reverend Eugene Klink officiating. Entombment was in the Chapel of Resurrection Mausoleum, Calvary Cemetery, Eau Claire. Memorial contributions may be sent to the Pastoral Care Department, Sacred Heart Hospital, 900 West Clairemont Avenue, Eau Claire, WI 54701-6122.

WILLIAM R. BURK

Denzil Lyle Goleman (1924-1998)

Denzil Lyle Goleman, age 74, Professor of Entomology and former Chairperson of the Department of Entomology at The Ohio State University, died 11 November 1998 at the Kolbacker House, Columbus, OH, after a one-year illness. He joined The Ohio Academy of Science in 1969, affiliated with Section Zoology, was elected a Fellow (1981), and was designated an Emeritus member (1989). Goleman will be remembered for his dedication to his profession, his commitment as a teacher, and his loyalty to the Department of Entomology.

Born 3 January 1924 in Oakland, IL, Denzil Lyle Goleman was the son of John Leslie and Viola (Bare) Goleman. Following graduation from high school, he entered the US Army and was a veteran of the Korean Conflict. In college, he earned degrees from Eastern Illinois State University (BS 1949) and Iowa State University (MS 1951; PhD 1954), specializing in entomology, plant pathology, and agronomy. His Master's thesis focused on "Insect Pests of Red Clover in Central Iowa in 1950," and his doctoral dissertation was a "Biological Study of the European Corn Borer in Boone County, Iowa." While a graduate student, Goleman was associated in research with the Agricultural Extension Service, Iowa State University (1951-1954).

Dr. Goleman's professional career began at The Ohio State University (OSU) where he was employed as an extension specialist in entomology for the Ohio Extension Service in the College of Agriculture (1954-1959). He then joined the American Cyanamid Company, Princeton, NJ (1959-1965), as the senior entomologist, and subsequently returned to OSU as the State Toxicologist and pesticide coordinator, where he was to aid in the development of an educational program toward the maintenance of a chemical-free environment for people and wildlife in Ohio (1965-1968). Following the creation of the College of Biological Sciences at OSU, Goleman was named chairperson (1968) of the newly created Department of Entomology, serving for 16 years and retiring as Professor Emeritus (1989). Goleman was also affiliated as a researcher at the OSU Ohio Agricultural Research and Development Center, Wooster, OH, and with the Ohio Cooperative Extension Service.

During the early 1950s Goleman was actively researching the European corn borer, insect pests of red clover, and seed treatments for vegetable crops in Iowa. During his career he wrote a number of extension service bulletins and popular articles about pesticides. In 1967 he was awarded US Patent Number 3,352,664 for his work on "Viscosity Stable Insecticidal and Herbicidal Compositions." Among professional organizations, Goleman was a member of the American Association for the Advancement of Science, the Entomological Society of America, and the Ohio Pesticide Institute.

Denzil Lyle Goleman cherished his family, fishing, and pie. He is survived by his wife Maurine (Morgan) whom he married 28 June 1952; three children, William Goleman of Nashua, NH, Kathryn (Goleman) McKee of Springfield, OH, and Jane Goleman of Columbus, OH; seven grandchildren; and a brother Lowell of Shelbyville, IL. His brother Leo and two foster brothers Ernest and Robert Stevens are deceased. Lyle Goleman was an active member of the Northwest United Methodist Church, Columbus, where he was involved with the Volunteers in Mission program. His funeral service was held at the church on 14 November 1998, with the Reverends William Hunter, Lynette Decker, and Harold Davidson officiating. Internment was in Union Cemetery, Columbus. Contributions to Lyle Goleman's memory are to be made to the Hospice at Riverside or the Northwest United Methodist Church, 5200 Riverside Drive, Columbus, OH 43220.

RONALD L. STUCKEY AND WILLIAM R. BURK

Robert Henry Mills (1920-1997)

Robert Henry Mills, age 77, District Conservationist in the US Department of Agriculture Soil Conservation Service, died 26 February 1997 in the Apostolic Christian Home, Rittman, OH, after a lengthy illness. A Mansfield, OH, resident since 1962, Mills served the US Army Air Corps during World War II. He joined The Ohio Academy of Science in 1952, affiliated with Section Natural Resources (vice president, 1967-1968), elected a Fellow (1960), and accorded Emeritus status (1986).

Born 6 February 1920 in Ashtabula, OH, Robert Henry Mills was the son of Henry C. and Wave (Stewart) Mills. He received the MS (1943) at The Ohio State University under the supervision of Lawrence E. Hicks. His Master's thesis entailed "An Ecological Study of a Central Ohio Woodlot." Serving as district conservationist for the USDA Soil Conservation Service in Williams, Crawford, and Richland counties, OH, Mills was honored by the Agriculture Department with the Superior Service Award. After retiring (30 July 1977), he became a self-employed timber stand improvement contractor in Richland and adjacent counties for eight years.

He held memberships in the All-Ohio Chapter, Soil Conservation Society of America (charter member), National Organization of Professional Employees, USDA; Ohio Conservation and Outdoor Education Association (charter member); Ohio Forestry Association; and Ohio Wildlife Federation. He was a member of the First Methodist Church. Since 1979, when Robert Mills was diagnosed with Parkinson's disease, he and his wife especially enjoyed spending summers in the relaxed atmosphere at their Noble County farm, near Senecaville, OH.

Robert Henry Mills, preceded in death by a brother and sister, is survived by his wife Lela (Britton) Mills; three sons, Thomas R. Mills of Kentwood, MI, David Mills of Mansfield, and Howard T. Mills of Ashland, OH; two daughters, Laura A. Ramsey of Shiloh, OH, and Bonnie E. Ahmed of Mansfield; and eight grandchildren. Visitation hours were held 28 February 1997 at the Ontario Home of Wapner Funeral Directors. The next day the Reverend Walter Orr officiated at Mills' funeral service, followed by internment at the Friends Cemetery, Quaker City, OH. Memorial donations may be sent to First United Methodist Church or Central Ohio Parkinson Society, 3166 Redding Road, Columbus OH 43221.

WILLIAM R. BURK

John Coleman Neupauer (1923-1998)

John Coleman Neupauer, age 75, electrical engineer, died on 29 June 1998, in Mercy Franciscan Hospital, Cincinnati, OH. During World War II he served in the US Air Force and spent a year in a German POW camp after his plane was shot down over the oilfields of Ploiesti, Romania.

Since 1975, Neupauer held membership in The Ohio Academy of Science and affiliated with Section Natural Resources.

Born in Czechoslovakia on 26 June 1923, John Coleman Neupauer was the son of John and Ethel (Schneller) Neupauer. Preceded by his father's move to the United States, he, his mother, and sister immigrated to the US in 1929 and reunited with John senior. John completed his secondary education at Weequahic High School, Newark, NJ. After being released from military service, he earned the BS in electrical engineering (1950) from Newark College of Engineering and the MS (1954) from the University of Pittsburgh. His Master's thesis was titled the "Simultaneous Single-line-to-ground Faults on Opposite Sides of Delta-wye Grounded Transformer Banks." After completing his undergraduate studies, he worked as an electrical engineer for Westinghouse in Pittsburgh, PA, and, for most of his career, in Cincinnati, OH. Neupauer was also a licensed professional engineer in Indiana, Kentucky, and Ohio.

John Neupauer's life long hobbies were stamp collecting and entomology. Following retirement (1984), he focused attention on studying wildflowers and bird watching. During his extensive travels to bird watch, sometimes outside the United States, he recorded over 2,000 species of birds. His private herbarium was donated to the University of Cincinnati. He held memberships in bird organizations and the local chapter of the Wildflower Preservation Society.

John C. Neupauer is survived by his wife Ruth (Linderman) Neupauer whom he married on 4 June 1955; a daughter, Jean Basel of Dublin, OH; and a sister, Marge Kunzle of Irvington, NJ. Visitation hours were held on 1 July 1998 at Vorhis Funeral Homes, Cincinnati, OH, and a funeral service was held on 2 July 1998 at the Wyoming Presbyterian Church, Wyoming, OH. Memorial contributions should be sent to Save the Animals Foundation, P.O. Box 9356, Cincinnati, OH 45209-0356.

WILLIAM R. BURK

Raymond Henry Norweb, Jr. (1918-1995)

Raymond Henry Norweb, Jr., age 76, Executive Director of the Holden Arboretum in Lake and Geauga counties, OH, died 6 June 1995, at the Maine Medical Center following a fall in his home in Boothbay Harbor, ME. Norweb was the great-grandson of Liberty E. Holden, founder of *The Cleveland Morning Plain Dealer*, and the grandson of Albert Fairchild Holden, founder of the Arboretum. Director of the Holden Arboretum (1959-1963), Norweb was honored with the Large Gold Medal of the Massachusetts Horticultural Society (1982) and with a Professional Citation from the American Horticultural Society (1983). He was named to the Ohio Conservation Hall of Fame (1982). A member of The Ohio Academy of Science since 1973, Norweb affiliated with Section Plant Sciences.

Born 19 August 1918 in Paris, France, Raymond Henry Norweb, Jr. was the son of R. Henry and Emery May (Holden) Norweb. His father was the US ambassador to France and young Henry Norweb traveled extensively with him while his father completed foreign service assignments in Europe and South America. In 1921 and 1922 when his parents were on duty in Japan, Henry and his brother and sister lived with a great uncle at the Norwebs' home in the Cleveland suburb of Bratenahl, a residence he referred to as "Katewood," his childhood home.

Raymond Henry Norweb, Jr. graduated from Milton Academy in Milton, MA (1936) and then earned the AB in history (1940) from Harvard University. His senior thesis was about the cheese industry in Ohio. Following graduation he worked a few months as a reporter for the *Cleveland Plain Dealer*. He joined the Ohio National Guard and then enlisted (1941) in the US 107th Armored Cavalry Regiment. After completing Officers Training School in Mammouth, NJ, he was commissioned a second lieutenant and sent to Harvard for a three-month radar course. Subsequently he was assigned to the headquarters of the 6th Air Force in Balboa, Panama. After demobilization Henry was discharged from the Air Force with the rank of captain and returned to Bratenahl. In Cleveland he worked (1946-1951) in the radio industry. His first radio position was at the *Plain Dealer* in the engineering section of the radio station it owned. He oversaw the installation of the first FM station to broadcast in Cleveland. He later joined the radio station WHK in Cleveland as a salesman. He then worked for Enamel Products Company, Cleveland (1952-1958), where he had risen to operating vice president.

The 1,500-acre Holden Arboretum, straddling Lake and Geauga counties in northeastern Ohio, was operated by volunteer administrators since its founding in 1931. Norweb was invited in 1959 to become the Arboretum's first executive director. Under his leadership the grounds were expanded to more than 3,100 acres, becoming one of the largest arboreta in the country committed to the care, study, and preservation of plants in a world famous garden.

Norweb held important positions in a number of horticultural and related organizations: American Association of Botanical Gardens and Arboreta (director), American Horticultural Society (director and recipient of the Professional Citation), Chadwick Arboretum, The Ohio State University (blue ribbon commission), Council on Botanical and Horticultural Libraries (chairman and president), Royal Horticultural Society in England (fellow), Visiting Committee to the Longwood Gardens near Philadelphia (chairman), and Visiting Committee to the Arnold Arboretum of Harvard University (chairman). Other horticultural society memberships included: American Rhododendron Society, International Dendrological Society, International Society of Arboriculture (honorary member), and Metropolitan Tree Improvement Alliance. Norweb served as surveyor of the museum assessment program, American Association of Museums and as conservationist, Squire Valleeview Farm, Case Western Reserve University. Named to the Ohio Conservation Hall of Fame (1952), Norweb also received honors from the Future Farmers of America (citation, 1970) and the International Lilac Association (award of Merit, 1980).

Norweb was a participant in many Cleveland area organizations: Blossom Site Committee for the Cleveland Orchestra (executive committee), Cleveland Council of World Affairs (board member), Lake County (OH) Beautification Commission, Lake County (OH) Chapter YMCA (taskforce, 1983), Lake View Cemetery Association (vice president), Musical Arts Association (trustee), Salvation Army Advisory Board for Northeastern Ohio (president), Society National Bank (director), and Northeastern Ohio Inter-Museum Council. He was the mayor of the Village of Bratenahl, OH (1956-1957). He held memberships in the Kirtland Country Club (Willoughby County) and the Fishing Union Club of Cleveland. He was also a member of Boothbay Harbor Club in Maine and La Garita Fishing in Colorado.

Norweb was a trustee of the Cleveland Audubon Society, Western Reserve Historical Society, Fine Arts Garden Commission, Cleveland Museum of Natural History, Cleveland Play House, Cleveland Society for the Blind, the John Huntington Fund for Education, Mentor Marsh Board of Management, and Shaker Lakes Nature Center. Following his family's interest in numismatics, he collected coins, particularly from Latin America. He was a member of the American Numismatic Society (president), Central States Numismatic Society, and Sociedade Numismatica Brasileira. Printed in a limited edition, *The Norweb Collection: An American Legacy* by Michael Hodder and Q. David Bowers (Wolfeboro, NH, Bowers and Merena Galleries, Inc. 1987) provides information on the Norweb coin collections and biographical information on R. Henry Norweb, Jr.

While in military service, Henry Norweb married Elizabeth Gardner of Orono, ME, on 11 September 1944. He is survived by her; a son, R. Henry III of Marion, MA; and two daughters, Constance Abbey and Emery May Miller; six grandchildren; and four step grandchildren. A memorial service was held 20 June 1995 at Trinity Cathedral Episcopal Church, 2021 East 22nd Street, Cleveland, OH. Subsequently a private burial service was held for the family.

RONALD L. STUCKEY AND WILLIAM R. BURK

James Gordon Ogden III (1928-1996)

James Gordon Ogden III, age 67, limnologist and paleobotanist, Professor of Biology at Dalhousie University (Halifax, Nova Scotia), and formerly Professor of Botany at Ohio Wesleyan University, Delaware, OH, died 17 April 1996 at his home in Martha's Vineyard, MA, after a lengthy illness. A recipient of a Guggenheim Memorial Foundation Fellowship (1962-1963), Ogden published numerous scientific articles covering the broad span of his scientific interests. He served as coeditor and associate editor of the journal *Radiocarbon* (1968-1981). His research on radiocarbon

dating to study the history of forests was the first of its kind in Ohio and culminated in the seminal paper, "Forest history of Ohio. I. Radiocarbon dates and pollen stratigraphy of Silver Lake, Logan County, Ohio" (Ohio J Sci 66:387-400). He joined The Ohio Academy of Science (1958-1974, 1990), affiliated with Section Plant Sciences, was elected a Fellow (1961), and participated in the Academy's Visiting Scientists Program (1961, 1962, 1964-1966).

James Gordon Ogden III (Pete), born 6 July 1928 in Martha's Vineyard, MA, was the son of Dorothy Frances (Phillips) and James Gordon Ogden, Jr. His childhood years were spent in Pittsburgh, PA, and Lakeland, FL. He and his parents enjoyed summers at their East Chop home on the Vineyard where Pete was an active member of the local beach and tennis clubs, and softball team. Ogden received the BS (1951) and BA (1952) from Florida Southern College (now University), MS (1954) from the University of Tennessee, and PhD in botany (1958) from Yale University. His thesis concerned "A Photo-tube Solar Radiation Integrator for Field Use," and his doctoral dissertation was titled the "Wisconsin Vegetation and Climate of Martha's Vineyard, Massachusetts." Gaining early professional experiences through assistantships in biology at Florida Southern College (1948-1952) and Yale University (1954-1957) and in botany at the University of Tennessee (1952-1954), Ogden also taught biology at Manatee County High School, FL (1952). Concurrently he served as climatologist, Connecticut Agricultural Experiment Station, New Haven, CT (1956). He was an assistant and associate professor (1958-1963) and professor and director of radiocarbon dating laboratory (1963-1969), Department of Botany and Bacteriology, Ohio Wesleyan University; and professor and director of radiocarbon dating laboratory, Department of Biology, Dalhousie University (1969-1994).

Dr. Ogden studied Pleistocene biogeography, pollen stratigraphy, paleoecology, paleoclimatology, microclimatic ecology, instrumentation for environmental investigations, post-glacial history of vegetation and climate, and impacts of eutrophication and acid-rain on water quality of streams and lakes in Nova Scotia. While in Ohio, he wrote on the early forests of Delaware County, using the bearing tree records from the 1832 and 1835 land surveys (Ohio J Sci 65:29-36). When Dr. Ogden received his Guggenheim fellowship, he took a leave of absence (1962-1963) to study, in part, radiocarbon dating laboratories in England, Denmark, Sweden, Norway, and Germany. During the summer of 1965 he conducted glacial research in Greenland with Ohio Wesleyan University colleague George Crowl.

Ogden's memberships in professional societies included: the American Association for the Advancement of Science (Fellow), American Institute of Biological Sciences, American Quaternary Association, American Society of Limnology and Oceanography, Botanical Society of America, Canadian Quaternary Association, and Ecological Society of America. He also served on the Membership Committee, Nova Scotia Environmental Control Council (1973-1977) and was also a member of the National Geographic Society. His excellence in scholarship was recognized with awards and honors: Gold Medal Award, Kappa Delta Pi (1951); Emile E. Watson Biology Medal (1951); Cullman Sterling Fellow, Yale University (1957-1958), and election to Sigma Xi. Recognizing Ogden's professional contributions to environmental stewardship, the government of Nova Scotia presented him (spring 1984) with the Environmental Control Award for 1983.

In later life Ogden devoted attention to environmental issues on Martha's Vineyard. He was a lecturer for the Nathan Mayhew Seminars and an advisor to the Friends of Sengekontacket. A contributor to the *Vineyard Gazette*, he was also a lifelong member and former officer of Union Chapel.

James Gordon Ogden III was predeceased by his first wife Anne Elise (Bowditch) Ogden whom he married on 28 July 1956. Surviving are their four children, Karen Frances Ogden of Oak Bluffs, MA, Lawrence Gordon Ogden of Hudson, Quebec, Ford Bowditch Ogden of the Boston, MA, area, and Eric Bowditch Ogden of Vineyard, MA; two grandchildren; and second, former wife Barbara Diana Lyon and her five children, Jennifer, David, Cailleagh, Joanna, and Gillian. Memorial services were held on 18 May 1996 in Chapman Cole & Gleason Funeral Home, Oak Bluffs. Contributions in memory of Pete Ogden may be sent to the Canadian Cancer Society (phone 888-939-3333). According to Ogden's former student of Halifax, Nova Scotia, John K. Underwood, who provided helpful information for this biographical sketch, "Pete had the never-ending kindness and patience of a teacher who shunned interference with inquisitive minds" (Eulogy for Dr. Ogden, given by John K. Underwood, 18 May 1996).

WILLIAM R. BURK

Robert Elliott Sharrock (1924-1998)

Robert Elliott Sharrock, age 74, supervisory training specialist for the US Department of Defense, died 13 December 1998 at Mariner Health of Bel Air, MD. While a military educator, he received numerous awards and was chairman of the Technical Services Committee, National Institute of Packaging, Handling, and Logistic Engineers. Sharrock was an ordained deacon and elder in the Christ Our King Presbyterian Church, Bel Air. He joined The Ohio Academy of Science in 1951, affiliated with Section Zoology, and was accorded Emeritus status (1988).

Robert Elliott Sharrock, born 18 August 1924, in Bryan, OH, was the son of Ralph Beaumont and Hazel Celicia (McTaggart) Sharrock. After receiving his diploma from Bryan High School, he served in the US Navy in the South Pacific as a pharmacist mate and ship's photographer (1942-1945). He earned the BS (1949) and MS in biology (1951) at the University of Toledo (OH). His Master's thesis focused on "The Reproductive Cycle of the Rainbow Trout (*Salmo gairdneri*). Following graduate school, he taught biology at the University of Toledo. Subsequently he served as an instructor in military packaging at the Joint Military Packaging Training Center (now the School of Military Packaging Technology) at Rossford Army Depot, Toledo, OH. When the entire school was transferred in 1963 to the Aberdeen Proving Ground, MD, Sharrock relocated to the new site. He advanced to a supervisory training specialist and retired in 1985 after 37.5 years of federal service.

Mr. Sharrock is survived by his wife Ruth Marie (Maneval) Sharrock whom he married 29 July 1944; a son, Dr. Robert E. Sharrock of Bryan, OH; a daughter, Kristine Ruth Holmes (Mrs. Mallard) of Ellicott City, OH; and six grandchildren. Memorial services were held 17 December 1998 at Christ Our King Presbyterian Church, Bel Air, MD, with the Reverend Linda J. Nepstad officiating. Internment was on 19 December 1998 at Shiffler Cemetery, Bryan. Contributions in memory of Robert Sharrock may be made to Christ Our King Presbyterian Church, 10 Lexington Road, Bel Air, MD 21014.

WILLIAM R. BURK

Arthur Lee Vorhies (1941-1998)

Arthur Lee Vorhies, age 57, Professor of Biological Sciences at Ohio University-Chillicothe, died 1 October 1998 in Riverside Methodist Hospital, Columbus, OH. Highly regarded by faculty and administrators at OU-Chillicothe, Dr. Vorhies was instrumental in the early organization of the campus faculty and was the driving force for the development of the merit salary system. He was known as a dedicated educator and a strong proponent of environmental issues. Vorhies joined The Ohio Academy of Science in 1978, affiliated with Section Zoology, and served as an invited reviewer of science education manuscripts for *The Ohio Journal of Science*.

Arthur Lee Vorhies, born 8 April 1941 in Canton, OH, was the son of John and Laura (Walker) Vorhies. Following his secondary education (1954-1959) at Canton McKinley High School, he attended Ohio University, Athens, where he received all of his degrees: BS in education (1965), MS (1967), and PhD (1992). His Master's thesis entailed "A Plankton Study of Dow Lake, Athens County, Ohio," and his doctoral dissertation concerned "The Performance Appraisal of the College Dean: An analysis of an instrument." Concurrently, Vorhies was a teaching assistant in zoology (1965-1967) at Ohio University. His professional experiences at Ohio University were: instructor (1966-1970), assistant professor (1970-1977), associate professor (beginning 1977), and professor. He taught a spectrum of courses including Botany, Human Services Technology, Microbiology, Safety Security, and Zoology. During summers Vorhies also taught in the Minority Introduction to College Program and the Kids in College Program, providing a valuable service to the local youth. Since 1991, he was a science education consultant for Teays Valley High School.

Dr. Vorhies was the recipient of two National Science Foundation grants, supporting human ecology work at the University of Alabama and forest ecosystem work at the University of Tennessee. He received an Ohio Board of Regents Academic Challenge Grant for the Science Enhancement at Ohio University-Chillicothe (1989-1995). The grant grew out of his concern to attract and retain more local students to the sciences, not only at the college level, but also primary and secondary levels. He held memberships in the American Association for the Advancement of Science, American Institute of Biological Sciences, and The National Association of Biology Teachers. Dr. Vorhies received (1982) a Certificate of Appreciation of the

American Association of University Women, Chillicothe, OH, for his outstanding service and contributions to the Association's program.

Dedicating and devoting his skills and time to educational causes, Vorhies was actively sought out as an advisor by students. In order to maintain adequate skills in field biology, he traveled widely to collect samples and to observe and photograph wildlife for educational use in his classes. At Ohio University-Chillicothe he organized and implemented the Math/Science division scholarship that lasted for three years. Dr. Vorhies supported local science fairs by serving as a judge, advisor to students, and even a provider of equipment to allow students to complete their projects. Renowned for his expertise in science education, he served on the steering, coordinator search, and resource development committees for Project Discovery, a state-wide program to improve science education in Ohio.

In addition to his devotion to science education, Vorhies actively served the Chillicothe campus of Ohio University. Among his numerous committee services were: holding memberships on the Senate Finance Committee, Professional Relations Committee, Promotion and Tenure Committee, and nearly all of the campus standing committees; chairing the Dean's Search Committee, Staff Development Committee, and the Long Range Planning Committee; and serving as Faculty Senator for two years. He was faculty chairperson for over 26.

Arthur Lee Vorhies is survived by his wife Victoria (Streicher) Vorhies whom he married 23 November 1991; a son, Christopher S. Vorhies; two step-daughters, Jennifer and Meredith Reep; two grandchildren; and his mother and stepfather, Laura and Charles Crum of Lakeland, FL. Following visitation hours held on 5 October 1998 at Haller Funeral Home, Chillicothe, was a memorial service with Reverend Bruce Viar officiating. Memorial contributions may be made to the Dr. Arthur L. Vorhies Scholarship Fund, c/o Ohio University-Chillicothe, 571 West Fifth Street, Chillicothe, OH 45601.

WILLIAM R. BURK

Bruce Van Scoyoc Weidner (1908-1998)

Bruce Van Scoyoc Weidner, age 90, Professor Emeritus of Chemistry at Miami University, died 25 November 1998 at Oxford View Nursing Center in Oxford, OH. Besides heading the analytical chemistry section of Miami's Department of Chemistry, he was one of the most active participants in the department's program of seminars. During World War II, he served in the US Army Air Corps and the US Air Force. For many years Dr. Weidner conducted annual educational programs for high school teachers in the physical sciences sponsored by National Science Foundation Summer Science Institutes at Miami University. He joined The Ohio Academy of Science in 1960, affiliated with Section Chemistry (vice president, 1973-1974), was elected a Fellow (1961), and became a Life Member (1985). His commitment to education extended to the Academy through his participation in its Visiting Scientists Programs (1961, 1964-1966, 1970).

Bruce Van Scoyoc Weidner, born 29 October 1908 in Pottstown, PA, was the son of Herman Wilhelm and Estelle (Van Scoyoc) Weidner. Earning all of his college degrees from Pennsylvania State College (now University), he received the BS (1931), MS (1932), and PhD in inorganic chemistry (1935). His master's paper was entitled "The Conductivity of Sulfuric Acid in Anhydrous Acetic Acid," and his doctoral dissertation involved "The Conductivity of Electrolytes in Anhydrous Acetic Acid." Weidner's early professional experiences were: chemist, Columbia Chemical Division, Pittsburgh Plate Glass Company (1930); graduate assistant in chemistry (1932-1935) and instructor in arts and science, Hazelton Undergraduate Center (1935-1937), Pennsylvania State College; instructor (1937-1939) and assistant professor of chemistry (1939-1942), University of Alaska; assistant professor of chemistry, Middlebury College (1942-1946); and associate professor, Utah State University of Agriculture and Applied Science (1946-1947). After joining the chemistry faculty at Miami University, Dr. Weidner advanced from associate professor (1947-1962) to professor (1962-1979). Concurrently he was research chemist, Atomic Energy Commission, Mound Laboratory, Monsanto Chemical Company (1952); and Associate Director (1959) and Director (1960-1967), NSF Summer Science Institutes at Miami University. In 1979, after retiring and being designated Professor Emeritus of chemistry, he won appointment as Visiting Scholar to Miami's Luxembourg Center for one semester. Among his research interests in quantitative and inorganic chemistry were conductivities, inorganic syntheses, the chemistry of polysulfides, metal alkoxides, and heats of combustion.

Bruce Weidner actively contributed to other educational and community causes. Besides teaching evening classes at Miami's off-campus Academic Centers for several years, he was secretary of the student council and manager of the rifle team. In service to the American Chemical Society's Division of Chemical Education, he assisted with Tests on Qualitative and Quantitative Exams (1945-1968) and was a reviewer for the *Journal of Chemical Education*. Locally, he was involved with Civil Defense and Little League baseball and served as a track and swimming official. Dr. Weidner enjoyed presenting seminars to numerous institutions and high schools in the Miami University region. As an analytical chemist, he also provided consultations for companies in the greater Oxford area.

Weidner held memberships in the American Chemical Society (Membership Committee, 1956-1958; Student Night Committee, 1956-1957; May Meeting Committee, 1965-1966), The American Association for the Advancement of Science, the American Association of University Professors, the New England Association of Chemistry Teachers, and the Society for Applied Spectroscopy (president, Cincinnati Chapter). Honors bestowed on him were election to Gamma Theta Phi, Phi Lambda Upsilon, and Sigma Xi.

Surviving are his wife Elsa (Ottinger) Weidner whom he married 22 June 1934; and two children, Gail (Weidner) Freno of Santa Cruz, CA, and Scott B. Anthony of Evanston, WY. Following Masonic services, memorial services were held 2 December 1998 at the Oxford Presbyterian Church. He is interred in Oxford, OH. Memorial contributions may be sent to the Department of Chemistry and Biochemistry, Miami University, 112 Hughes Hall, Oxford, OH 45056.

WILLIAM R. BURK

Charles Wellington Zimmerman (1910-1997)

Charles Wellington Zimmerman, age 87, former science teacher in the Bowling Green City School District (OH) died 10 November 1997, in the Otterbein-Cridersville Retirement Community, Cridersville, OH. In the US Army during World War II, Zimmerman served in England, Africa, and France. Enjoying and devoting his life as a teacher, he gained a reputation for motivating students to conduct research. A member of The Ohio Academy of Science since 1951, Zimmerman affiliated with Section Science Education (vice president, 1966-1967), was elected a Fellow (1965), and accorded Emeritus status (1986).

Charles Wellington Zimmerman, born 17 October 1910 in Upper Sandusky, OH, was the son of Wellington Carol and Georgia B. (Brown) Zimmerman. Young Charles and his five brothers shared in plowing, planting corn, and assisting with other chores on their father's "Clements" Ohio farm. After graduating from Upper Sandusky High School (1929), Charles studied at The Ohio State University where he received the BA (1938). At the conclusion of the war, the G.I. bill allowed Zimmerman to continue his college education, resulting with the MS (1949) in botany from OSU. His Master's thesis, "The Use of the Sweet Potato, and Other Materials in the Teaching of Biology," was completed under the supervision of Professor Glenn W. Blaydes. As a science teacher, he taught at Upper Sandusky, Wauseon, Cygnet, and Greenfield, all in Ohio, before teaching in the Bowling Green City School District (1957-1974).

Charles Zimmerman held membership in The Ohio State University Alumni Association and the National Education Association. He was elected a fellow in the Ohio Education Association and the Ohio Retired Teachers Association.

Predeceased by his wife Florence K. Kendall whom he married on 16 April 1949, Charles W. Zimmerman is survived by two brothers, Lewis A. Zimmerman of Delaware, OH, and Berton Zimmerman of Bucyrus, OH. Three brothers, Robert, Edwin, and Franklin Zimmerman, are deceased. On 12 November 1997, visitation hours were held at the First United Methodist Church, Bowling Green, where Charles was a member. He was buried in the Weston Cemetery, Weston, OH. The Reverend Kathleen Ackley officiated and Dunn Funeral Home, Bowling Green, made the arrangements. Memorial contributions may be made to the First United Methodist Church (1506 E. Wooster Street, Bowling Green, OH 43402-3338).

WILLIAM R. BURK